

I CLAIM:

1. A computer-implemented method for controlling execution of application software by a computer terminal, at least a first portion of the application software being loaded into a data storage medium of the computer terminal, said method comprising:

- a) when it is intended to execute the application software, enabling the computer terminal to detect presence of an electronic key that is connected thereto;
- 10 b) inhibiting execution of the application software upon detection by the computer terminal that the electronic key is disconnected therefrom;
- c) upon detection by the computer terminal that the electronic key is connected thereto, enabling the computer terminal to verify presence of a software registration code in each of the computer terminal and the electronic key;
- 15 d) upon detection by the computer terminal that at least one of the computer terminal and the electronic key does not have a software registration code stored therein, enabling the computer terminal to initiate a registration procedure with a remote server so as to obtain the software registration code therefrom and so as to store the software registration code obtained from the remote server in each of the computer terminal and the electronic key;
- 20 e) upon detection by the computer terminal that at least one of the computer terminal and the electronic key does not have a software registration code stored therein, enabling the computer terminal to initiate a registration procedure with a remote server so as to obtain the software registration code therefrom and so as to store the software registration code obtained from the remote server in each of the computer terminal and the electronic key;
- 25 f) upon detection by the computer terminal that at least one of the computer terminal and the electronic key does not have a software registration code stored therein, enabling the computer terminal to initiate a registration procedure with a remote server so as to obtain the software registration code therefrom and so as to store the software registration code obtained from the remote server in each of the computer terminal and the electronic key;

e) upon detection by the computer terminal that each of the computer terminal and the electronic key has a software registration code stored therein, enabling the computer terminal to verify if the software registration code stored in the computer terminal matches that stored in the electronic key;

f) enabling further execution of the application software by the computer terminal upon detection thereby that the software registration code stored in the computer terminal matches that stored in the electronic key; and

g) aborting further execution of the application software by the computer terminal upon detection thereby that the software registration code stored in the computer terminal does not match that stored in the electronic key.

2. The computer-implemented method as claimed in Claim 1, the data storage medium of the computer terminal that has the first portion of the application software loaded therein being a hard disk, wherein said step d) includes the sub-step of:

enabling the computer terminal to transmit user information to the remote server, the user information including at least one of a software serial code associated with the application software, a key serial code associated with the electronic key, and a disk serial number associated with the hard disk.

3. The computer-implemented method as claimed in Claim 1, a second portion of the application software being resident in the remote server, wherein said step d) includes:

5 enabling the computer terminal to download the second portion of the application software from the remote server and to store the second portion of the application software in the electronic key when the software registration code is obtained from the remote server.

10 4. The computer-implemented method as claimed in Claim 1, wherein, in step f), further execution of the application software is aborted by the computer terminal upon detection by the computer terminal that the electronic key was disconnected therefrom.

15 5. The computer-implemented method as claimed in Claim 1, wherein said step g) includes:

 enabling the computer terminal to initiate the registration procedure with the remote server upon detection by the computer terminal that the software registration code stored in the computer terminal does
20 not match that stored in the electronic key; and

 aborting further execution of the application software by the computer terminal when the registration procedure is unsuccessful.

25 6. The computer-implemented method as claimed in Claim 1, wherein said step f) includes:

enabling the electronic key to generate a random verification code transmitted to and stored in the computer terminal in an encrypted and compressed format;

5 upon detection by the electronic key that a verification period corresponding to the verification code and set by the electronic key has expired, enabling the electronic key to compare the verification code stored in the computer terminal with that generated thereby;

10 upon detection by the electronic key of a match between the verification code stored in the computer terminal and that generated thereby, enabling further execution of the application software by the computer terminal, and enabling the electronic key to generate
15 another verification code with a corresponding verification period; and

 upon detection by the electronic key that the verification code stored in the computer terminal does not match that generated thereby, enabling the computer
20 terminal to initiate the registration procedure with the remote server.

7. The computer-implemented method as claimed in Claim 6, wherein the random verification code is transmitted to and stored in the computer terminal in an encrypted
25 and compressed format.

8. The computer-implemented method as claimed in Claim 3, wherein said step f) includes, when the computer

terminal intends to execute the second portion of the application software in the electronic key,

enabling the computer terminal to send data to be processed using the second portion of the application software to the electronic key,

enabling the electronic key to perform calculations associated with the second portion of the application software using the data from the computer terminal, and

enabling the electronic key to send results of the calculations performed thereby to the computer terminal.

9. The computer-implemented method as claimed in Claim 8, wherein the results of the calculations performed by the electronic key are sent to the computer terminal in an encrypted and compressed format.

10. A computer program product comprising program instructions for causing a computer terminal to perform steps of the computer-implemented method according to Claim 1.

11. A software registration method, comprising:

a) providing a computer readable storage medium and an electronic key, the computer readable storage medium comprising program instructions of at least a first portion of application software to be loaded into a data storage medium of a computer terminal, the electronic key being connectible to the computer terminal;

b) providing a remote server that permits the computer terminal loaded with the application software and connected to the electronic key to initiate a registration procedure therewith for storing user information in the remote server; and

c) enabling the remote server to issue a software registration code required by the computer terminal when executing the application software upon determination by the remote server that the registration procedure in step b) was successful.

12. The software registration method as claimed in Claim 11, wherein the user information includes at least one of a software serial code associated with the application software, a key serial code associated with the electronic key, and a disk serial number associated with the data storage medium of the computer terminal.

13. The software registration method as claimed in Claim 11, wherein a second portion of the application software is resident in the remote server, said step c) further including:

enabling the computer terminal to download the second portion of the application software from the remote server for storage in the electronic key.